Principles Of Ceramics Processing, 2nd Edition
Synopsis

This popular reference offers a clear understanding of the scientific principles of ceramics processing required for the development and production of new advanced ceramics. In the latest edition significant new material has been added to the chapters on raw materials, liquids and surfactants, vapor deposition, printing, coating processes and firing. Contains several new features including processing flow diagrams, tables summarizing important points, 100+ new figures as well as descriptions of defects and their causes which are either itemized in the text or summarized in a table. Also includes numerous problems and examples following each chapter. An Instructor’s Manual presenting detailed solutions to all the problems in the book is available from the Wiley editorial department.

Book Information

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Customer Reviews

I used this text for a materials graduate class and found it to be one of the most tedious texts that I have used to date during my undergraduate or graduate education. While apparently comprehensive relative to the subject, the material is not well organized and, at times, has a stream of consciousness flavor to it. It drones on and on with qualitative comments intermingled with quantitative; the graphics are one-dimensional and exclusively black and white. The whole text has a very dated feel, which may be reflective of its 1995 copyright. In general, I found this text to be difficult to read for any length of time. Conversely, I have been exposed to other texts that engage
the reader and pique your curiosity to go further. Reed doesn't do that, in fact, I found myself becoming less interested in ceramics than before I began the class! If you are using it for a class, there is not much you can do, but if you have a choice, this isn't the ceramics text to chose.

An elective course I am taking gave problem sets out of this book, so I purchased it to be able to do the homework. I have only read the portions of the book that pertain to the assigned homework problems. Although this amounts to only a paragraph or two per week, I consistently find that there are typos and inconsistencies in what little material I read. I can't speak for the whole body of this book, since I do not plan to read the rest of the text. But based on my experience, I can only assume that the rest is just as error riddled as what I have read. My recommendation is to use the book lightly so that you can resell it afterwards. I would feel much more comfortable using lecture notes or wikipedia as a reference instead of this book.

I am a material science student. The book is somewhat easy to read but is not what I'd call vigorous. If you do wish to learn about ceramic processing, shop around first.

I am classically trained in the field of powder processing and use this book almost daily to communicate basic principles of the field to those from other areas of science. The college text is well written with excellent diagrams. The problem sets offer practical demonstrations of the material presented in each chapter. The author uses basic principles of chemistry and physics to construct the critical principles of processing powder systems. I would strongly suggest this book to anybody working in the field of ceramic powder processing. The text would be appropriate for teaching either undergraduate or graduate courses in the field.

Great

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